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Page(s): 198 -199

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Page(s): 760 -761 vol.2

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Page(s): 1064 -1066

[\[Abstract\]](#) [\[PDF Full-Text \(177 KB\)\]](#) **IEEE JNL**

4 Subwavelength lithography and its potential impact on design and EDA

Kahng, A.B.; Pati, Y.C.;

Design Automation Conference, 1999. Proceedings. 36th , 21-25 June 1999

Page(s): 799 -804

[\[Abstract\]](#) [\[PDF Full-Text \(764 KB\)\]](#) **IEEE CNF**

5 Subwavelength lithography (PSM, OPC)

Terasawa, T.;

Design Automation Conference, 2000. Proceedings of the ASP-DAC 2000. Asia and South Pacific , 25-28 Jan. 2000

Page(s): 295 -300

[\[Abstract\]](#) [\[PDF Full-Text \(488 KB\)\]](#) **IEEE CNF**

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Page(s): 584 -585 vol.2

[\[Abstract\]](#) [\[PDF Full-Text \(240 KB\)\]](#) **IEEE CNF**

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Page(s): 182 -183

[\[Abstract\]](#) [\[PDF Full-Text \(249 KB\)\]](#) **IEEE CNF**

8 Theoretical MEF calculation for periodic patterns

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Page(s): 16 -17

[\[Abstract\]](#) [\[PDF Full-Text \(144 KB\)\]](#) **IEEE CNF**

9 Reticle enhancement technology: implications and

challenges for physical design

Grobman, W.; Thompson, M.; Wang, R.; Yuan, C.; Tian, R.;
Demircan, E.;

Design Automation Conference, 2001. Proceedings , 18-22 June 2001

Page(s): 73 -78

[\[Abstract\]](#) [\[PDF Full-Text \(528 KB\)\]](#) **IEEE CNF**

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Page(s): 62 -65

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Design Automation Conference, 1999. Proceedings. 36th , 21-25
June 1999

Page(s): 798 -798

[\[Abstract\]](#) [\[PDF Full-Text \(88 KB\)\]](#) **IEEE CNF**

12 **Practical application of full-feature alternating phase-shifting technology for a phase-aware standard-cell design flow**

Sanie, M.; Cote, M.; Hurat, P.; Malhotra, V.;

Design Automation Conference, 2001. Proceedings , 18-22 June 2001

Page(s): 93 -96

[\[Abstract\]](#) [\[PDF Full-Text \(404 KB\)\]](#) **IEEE CNF**

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Page(s): I-186 -I-187 vol.1

[\[Abstract\]](#) [\[PDF Full-Text \(190 KB\)\]](#) **IEEE CNF**

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Page(s): 654 -655 vol.1

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Page(s): 25 -33

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Page(s): 192

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Page(s): 97 -98

[\[Abstract\]](#) [\[PDF Full-Text \(228 KB\)\]](#) **IEEE CNF****4 Subwavelength optical elements (SOEs) and nanofabrications - a path to integrate optical communication components on a chip**

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Summaries of Papers Presented at the , 19-24 May 2002
Page(s): 250 vol.1

[\[Abstract\]](#) [\[PDF Full-Text \(272 KB\)\]](#) **IEEE CNF**

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Proceedings of the IEEE , Volume: 90 Issue: 10 , Oct. 2002

Page(s): 1653 -1669

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Page(s): 135

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Page(s): 156 -158 vol.1

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Page(s): 439 -440 vol.2

[\[Abstract\]](#) [\[PDF Full-Text \(144 KB\)\]](#) **IEEE CNF**

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Page(s): 206 -209

[\[Abstract\]](#) [\[PDF Full-Text \(315 KB\)\]](#) **IEEE CNF**

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Page(s): 230 -235

[\[Abstract\]](#) [\[PDF Full-Text \(899 KB\)\]](#) **IEEE CNF**

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Page(s): 5 -6

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Page(s): 289 -295

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2000. Asia and South Pacific , 25-28 Jan. 2000

Page(s): 295 -300

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Ishitani, A.;

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Page(s): 66 -67

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Page(s): 732 -733 vol.3

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Page(s): 595 -599 vol.1

[\[Abstract\]](#) [\[PDF Full-Text \(608 KB\)\]](#) **IEEE CNF**

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Khaira, M.S.;
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Page(s): 157

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Page(s): 1944 -1947

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Page(s): 694 -699

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Page(s): 57 -58 vol.1

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Page(s): 173 -176

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Page(s): 865 -869 vol.2

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Page(s): 2241 -2243

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Page(s): 2476 -2483

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Page(s): 1000 -1004 vol.2

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Page(s): 462 -465 vol.1

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Page(s): 1752 -1759

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Page(s): 440 -444 vol.1

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standard-cell design flow


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As the semiconductor industry enters the subwavelength era where silicon features are much smaller than the wavelength of the light used to create them, a number of "subwavelength" technologies such as Optical Proximity Correction (OPC) and Phase-Shifting Masks (PSM) have been introduced to produce integrated circuits (ICs) with acceptable yields. An effective approach to subwavelength IC production includes a combination of these techniques, including OPC and PSM. Nevertheless, ...

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The use of phase shifted mask (PSM) has been demonstrated to be a powerful resolution enhancement technique (RET) for the printing of features at dimensions below the exposure wavelength in deep submicron technologies. Its implementation in physical design has introduced non-conventional design ground rules, which impact the traditional layout migration process and designers productivity. In this panel discussion paper, we propose a solution to extend the traditional constraint-based layout ...

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